IRRIGATION

USERS

HANDBOOK

FOR

NORTHWOOD PARK ESTATES

JULY, 2007 Rev 1

HANDBOOK OVERVIEW

Northwood Park Estates has and uses an irrigation system engineered and installed by Stewart Pipe Co. of Phoenix. The entire system is owned, operated and maintained by the Northwood Park Home Owners Association, herein HOA.

Water for our system is purchased from Roosevelt Irrigation District, and is delivered into our system from the canal running north of our neighborhood. Currently, water is ordered every other weekend.

Lot owners must order water through the HOA to be delivered to their respective lots through the underground system.

During an irrigation cycle, lot owners who have ordered irrigation, should be prepared to receive their water any time, day or night, weekdays and weekends.

Please check the community bulletin board at the corner of Wood and Turquoise Street for the irrigation schedule. Or you may view it on the internet at www.northwoodpark.org.

The following handbook was designed as a cooperation between the Irrigation Committee and the Home Owners Association, and is intended to assist lot owners in the use of our irrigation system.

Sincerely,

Northwood Park Estates HOA

I. SYSTEM LAYOUT

Our system is fed through a single canal valve and weir box, located at the northeast corner of Illini Street. Water then runs into **Standpipe 1**, (see map on next page) and from there can be directed to the south, **thru valve 2**, or to the west into **Standpipe 3**.

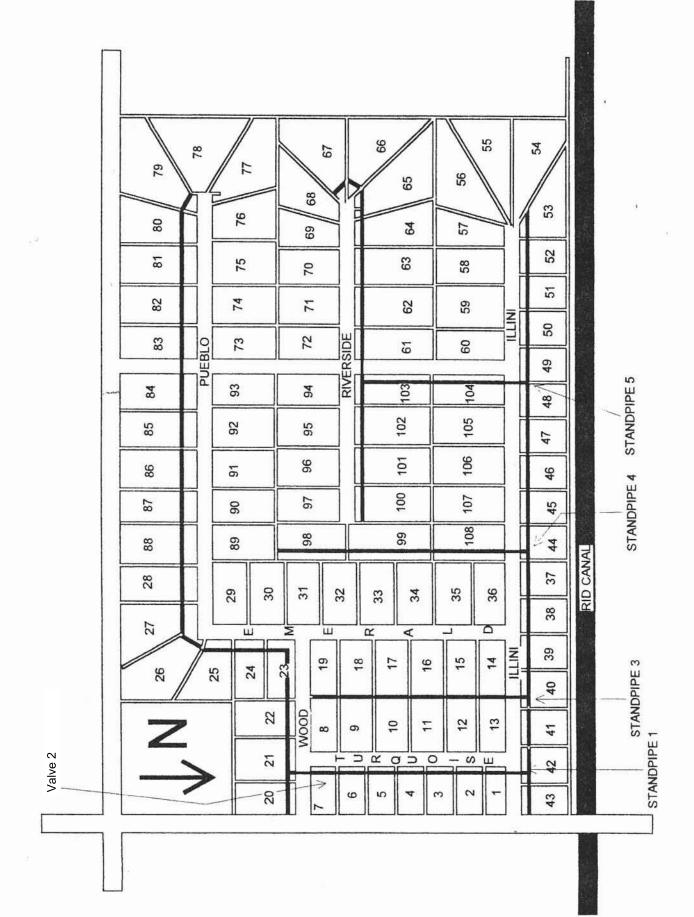
Valve 2 feeds under Wood Street, then to the east and west.

Standpipe 3 feeds to the south thru the alley between Emerald 8 Turquoise Sts. as well as feeding to the west, and into **Standpipe 4**.

Standpipe 4 feeds to the south, for the lots on the west side of Emerald St. and for various lots directly adjacent to those on Emerald. **Standpipe 4** also feeds to the west, into **Standpipe 5**.

Standpipe 5 feeds to west to serve those lots along Illini St., west of Parkman Ln. and to the south for most of the remaining lots.

Each standpipe is equipped with valve wheels on the top of the pipe, used to open and close the valves that direct water flows. By opening a valve, water is sent in that valves direction.



II. STANDPIPE GUIDE

TO GET WATER HERE... DO THIS...

LOT#	
1 THRU 7	OPEN SOUTH VALVE ON STANDPIPE 1
8 THRU 19	OPEN WEST VALVE ON STANDPIPE 1 OPEN SOUTH VALVE ON STANDPIPE 3
20 THRU 28 73 THRU 88 90 THRU 93	OPEN SOUTH VALVE ON STANDPIPE 1 OPEN VALVE 2
29 THRU 36 &	OPEN WEST VALVES ON BOTH STANDPIPES 1&3
89; 98; 99; 108	OPEN SOUTH VALVE ON STANDPIPE 4
37,38,39,44,	OPEN WEST VALVES ON STANDPIPES 1 & 3
40 & 441	OPEN WEST VALVE ON STANDPIPE 1 ONLY
42 & 43	NO NEED TO OPEN ANY STANDPIPES
45 THRU 48	OPEN WEST VALVES ON STANDPIPES 1,3,4
61 THRU 72 & 94 THRU 97 & 100 THRU 107	OPEN WEST VALVES ON STANDPIPES 1,3,4 OPEN SOUTH VALVE ON STANDPIPE 5
49 THRU 60	OPEN WEST VALVE ON STANDPIPES 1,3,4,5

ALL OTHER STANDPIPE VALVES MUST BE CLOSED FOR PROPER WATER FLOW

III. SCHEDULING

Currently, irrigation is scheduled for every other weekend. Any lot owner who has sufficient funds in their irrigation account, may order irrigation. Lot owners must remember that it is their responsibility to maintain their accounts, and that statements are just reminders, and not bills.

The schedule order sheet located within the irrigation stand located at the northeast corner of Turquoise and Wood streets, may include...

NAME, The last name of the lot owner ordering irrigation.

LOT, The lot number the water is ordered for.

START DATE, The date that the irrigation for that lot, is to start.

START TIME, The time that the irrigation for that lot, is to start.

STOP DATE, The date that the irrigation for that lot is to stop.

STOP TIME, The time that the irrigation for that lot is to stop.

ALLOTMENT, The maximum amount of irrigation time for that lot.

(see sec. IX. ALLOTMENTS)

SIGN-UP, The area to place orders for the next irrigation cycle.

SURPLUS REQUEST, This is the area to request additional irrigation time over your normal allotment. This time may not be available every time, **this is no guarantee.**

You have two places to view the completed schedule. On the community board at the corner of Wood & Turquoise St or you can view it on the Internet at www.northwoodpark.org

IV. ORDERING IRRIGATION

Lot owners may order irrigation up to the Wednesday before an irrigation cycle is to start. This will allow sufficient time to prepare and post a schedule. Orders are placed by signing up on the posted irrigation schedule, located within the irrigation stand at the northwest corner of Turquoise and Wood streets.

To order, lot owners simply locate their name on the previous schedule, follow their line across to the "SIGN-UP" box, and enter their irrigation order (in minutes) in that box. Lot owners should remember that the schedule rotates in a specific pattern to prevent the same lots from receiving the worst times. For this reason, special requests for start and stop times cannot be honored. Furthermore, lot owners will not be automatically placed on schedules, and will have to physically sign-up if they wish to irrigate. Completed schedules, or notices of delay, will be posted no later than 9:00 p.m. the evening before the scheduled start date.

V. RECEIVING IRRIGATION

Water will be delivered to the lots via the underground irrigation system. Each lot is provided with one (1) yard valve for the delivery of irrigation water. Several lots may also have an additional valve for use in flushing out the system and periodic maintenance. Through construction and landscaping, these valves may become buried. For assistance in locating valves, please contact the Irrigation Committee.

Lot owners can determine their irrigation start and stop times by reading the irrigation schedule, posted at the irrigation stand. Please be accurate in your start and stop times, due to limited allotments, three to five minutes turns out to be a lot of water. Lot owners who abuse their start and stop times may be penalized by the HOA, up to and including revocation of the ability to use our system.

It is the responsibility of each lot owner to operate the system for delivery of water to their lot. This may be as simple as just opening their yard valve, or as complicated as opening several standpipes to direct water to their lot. Therefore it is important that each person who may use the system, knows how the system operates. Interruption of water and the loss of time due to the lot owners inability to properly operate the system not be refunded or credited back to their account.

Lot owners who abuse the availability of the Irrigation Committee and the HOA, for assistance in operating the system, may be penalized up to revocation of the ability to use our system.

It is the responsibility of each lot owner to maintain all their irrigation water to their lot. Runoff water not only causes muddy streets, but may damage landscaping that is not designed for irrigation. RID may also levy fines for runoff and water waste.

VI. PRO-RATE

During the summer months, when water demand is at a maximum, R.I.D. enforces a PRO-RATE period. Each parcel of land within the irrigation district has a pre-set water buy, or right to irrigation water. The water buy is determined by parcel size, and runs for a 21 day cycle.

Within Northwood Park, lot owners may choose to take their entire allotment total within one irrigation schedule, or may choose to break it up in schedules. Either way, orders will be followed closely by both the HOA. as well as R.I.D. to avoid overuse and abuse by lot owners.

Lot owners who order, and are scheduled irrigation, but through their own fault miss their scheduled time, will be considered to have received said water. Furthermore, there will be no opportunity for a refund or credit of time or water. This missed time will count toward their allotment total.

Establishing pro-rate periods, and the calculation of water buys falls outside the control of the Northwood Park Home Owners Association, as well as the Irrigation Committee. (See sec. IX. ALLOTMENTS, for allotment calculations)

VII. PAYMENTS STATEMENTS

Lot owners will prepay for all irrigation services, only checks and money orders will be accepted, NO CASH. Checks are to be made out to: NORTHWOOD PARK HOME OWNERS ASSOCIATION, or simply NWPHOA.

MAIL CHECKS OR MONEY ORDERS TO:

Northwood Park H.O.A. P.O. Box 82 BUCKEYE AZ. 85326

It is the responsibility of each lot owner to maintain an adequate balance in their account. Lot owners whose accounts are less than the minimum required (\$25), will not get scheduled.

Because all payments may not be received prior to scheduling, it is recommend that lot owners using the irrigation system maintain a minimum balance(in excess of \$25) within their account that will cover at least one irrigation.

The checks in the mail & I didn't know excuses will not be accepted. Although the recommended minimum account balance is \$35.00, lot owners may keep as much as they wish in their accounts. Remember, irrigation costs are the same for everyone, so the more you pre-pay now, the less often you'll have to pay later. Remember, delinquent accounts may result in a missed order without warning.

VII.a. Statements

Statements are available on the internet, to all lot owners who maintain any balance for irrigation, and have used irrigation since the last statement. Statements are not bills, they are only a reminder of your account activity and balances up to the statement closing date. It remains the responsibility of the lot owner to maintain and adequate balance within their account

Lot owners have 30 days from the statement date to question and request in writing modification to their statement. Mail requests and questions to the address above.

VIII. TROUBLESHOOTING PROBLEMS

Lot owners must remember that irrigation is not an exact science.

Because canal levels may rise and fall throughout the day and night, the level of water received may not always be the same. To accommodate this, R.I.D. will usually provide us with an extra pad of water flow above our normal ordered amount. In the event that the canal level falls, this pad will help maintain our order. The bad news is that some lot owners may come to expect this extra flow pressure, so that if the canal falls, even though we are receiving our order, people feel we are falling short, and there must be a problem. With this in mind, occasionally there will be a problem that needs attention.

R.I.D. has requested that there be only one person who contacts them in the event the problem is theirs. That person will be selected by the Irrigation Committee, and may be contacted at: **386-0685**.

It is the lot owners responsibility to troubleshoot their own problems.

Calling Irrigation Committee members or HOA members for assistance with troubleshooting should be viewed as a last resort. Lot owners who abuse the availability of any of the above listed resources for troubleshooting help, may be penalized.

Water time lost during troubleshooting problems other than R.I.D. caused problems, will not be refunded or credited back to your account. Un-scheduled lot owners who cause irrigation problems for scheduled lot owners, will be liable for any lost water time and may face other penalties as established by the HOA.

KNOWLEDGE OF HOW THE SYSTEM OPERATES GREATLY REDUCES THE TIME NECESSARY FOR ANY TROUBLESHOOTING AND THEREFORE IT IS RECOMMENDED THAT ALL LOT OWNERS FAMILIARIZE THEMSELVES WITH HOW THE SYSTEM WORKS.

Both the Irrigation Committee and HOA members will make themselves available to any lot owner who wishes to be educated on irrigation system operation.

VIII. TROUBLESHOOTING, cont.

IN THE EVENT OF A FLOW PROBLEM, THE FOLLOWING STEPS SHOULD BE TAKEN:

- 1.) Check to ensure that you have read the schedule correctly, and that you should be irrigating.
- 2.) Check to see that your yard valve is open and unclogged with debris.
- 3.) Check to see that the standpipe supplying your lot is open in the right direction, and there is water flowing into the standpipe.
- 4.) Check all preceding standpipes to see they are open and flowing in your direction.
- 5.) Check to see that your neighbors have not run long or started early.
- 6.) If the steps above do not find a cause for your problem, call the contact person.

Debris may become trapped in the system from time to time causing flow restriction. The system may need to be shut down, for removal of the debris. This is a risk inherent to irrigation, and the water time lost will not be refunded or credited.

IX. ALLOTMENTS

Northwood park estates, is located within the Roosevelt Irrigation District. This is who the HOA purchases the water from. Each parcel of land within the district has a specific right to irrigation water; this is called a water buy, or water right. Each water right allows 4 inches of irrigation water over a 21 day period. The biggest factor that affects us at Northwood Park is the amount of time necessary to deliver the full 4 inches of water. This is called the allotment time. The following equation is used to calculate the amount of time each lot is to receive. (The constant values are given)

QT=DA

Where: $\mathbf{Q} = \text{HEAD SIZE IN CUBIC FEET PER SECOND (2CFS)}$

T = TIME NEEDED TO DELIVER 4 INCHES OF WATER

D = DESIRED DEPTH OF IRRIGATION (4 INCHES)

A = LOT SIZE IN ACRES

So for a one acre lot, the equation would go as follows:

- 1.) QT = DA
- 2.) 2xT = 4x1
- 3.) 2T/2 = 4/2
- 4.) T = 2 hours

So a one acre lot needs two hours of irrigation to receive 4 inches of water.

Allotments will be calculated by the *Committee*, using the lot sizes provided by RID. If the lot owner has a discrepancy with the allotment set, simply providing proof of the difference in lot size will be sufficient to amend the allotment; Proof will be in the form of lot records showing total square footage as provided by the *County Recorders Office*.

Please remember, utility easements **DO NOT** figure into the total square footage figures.

IX. ALLOTMENTS

Some lot owners may find that their allotments do not cover their entire lots. This does not mean they are not receiving their entire allotments, but may indicate that the lot is unleveled; that soil conditions may absorb the water faster than other lots or high and low spots in the lot prevent proper coverage. The lot owners should also remember that the 4 inch figure used in the calculation is for depth of water delivered, and does not indicate that lot owners should expect 4 inches of water depth sitting on their property.

The irrigation *Committee* and the *HOA* assume no responsibility for lot owners property.

X. ON-CALL IRRIGATION PERSON

It is the intent that the On-Call person will return your call as soon as possible. Furthermore, please limit calls to normal business hours, unless there is a situation that arises after hours, such as low irrigation flow, or damage to the irrigation system. Before any call is made please try identify the cause of your problem first. In other words, check that no one else is irrigating at the same time as you, check the schedule, check that your standpipe is open and all the others are

Questions about your statement, when are we going to irrigate, or similar questions, are not immediately necessary information and thus not intended for the On-Call person. For these you may use the normal means of contact such as the posted phone numbers of committee and board members.

PROBLEM NUMBER: 386-0685